

Smart Skies			
2009 Science			
Academic Standards			
Minnesota Science			
Grade 5			
Activity/Lesson	State	Standards	
Fly by Math	MN	SCI.5.5.1.3.4.1	Use appropriate tools and techniques in gathering, analyzing and interpreting data.
Fly by Math	MN	SCI.5.5.2.2.1.2	Identify the force that starts something moving or changes its speed or direction of motion.
Fly by Math	MN	SCI.5.5.2.2.1.3	Demonstrate that a greater force on an object can produce a greater change in motion.
Line Up with Math	MN	SCI.5.5.2.2.1.2	Identify the force that starts something moving or changes its speed or direction of motion.
Smart Skies			
2009 Science			
Academic Standards			
Minnesota Science			
Grade 6			
Activity/Lesson	State	Standards	
Fly by Math	MN	SCI.6.6.2.2.1.1	Measure and calculate the speed of an object that is traveling in a straight line.
Fly by Math	MN	SCI.6.6.2.2.1.2	For an object traveling in a straight line, graph the object's position as a function of time, and its speed as a function of time. Explain how these graphs describe the object's motion.
Fly by Math	MN	SCI.6.6.2.2.2.1	Recognize that when the forces acting on an object are balanced, the object remains at rest or continues to move at a constant speed in a straight line, and that unbalanced forces cause a change in the speed or direction of the motion of an object.
Line Up with Math	MN	SCI.6.6.2.2.1.1	Measure and calculate the speed of an object that is traveling in a straight line.
Line Up with Math	MN	SCI.6.6.2.2.1.2	For an object traveling in a straight line, graph the object's position as a function of time, and its speed as a function of time. Explain how these graphs describe the object's motion.
Line Up with Math	MN	SCI.6.6.2.2.2.1	Recognize that when the forces acting on an object are balanced, the object remains at rest or continues to move at a constant speed in a straight line, and that unbalanced forces cause a change in the speed or direction of the motion of an object.
Smart Skies			
2009 Science			
Academic Standards			
Minnesota Science			
Grade 8			
Activity/Lesson	State	Standards	

Fly by Math	MN	SCI.8.8.1.3.3.2	Understand that scientific knowledge is always changing as new technologies and information enhance observations and analysis of data.
Smart Skies			
2009 Science			
Academic Standards			
Minnesota Science			
Grades 9-12			
Activity/Lesson	State	Standards	
Fly by Math	MN	SCI.9-12.9.1.1.2.1	Formulate a testable hypothesis, design and conduct an experiment to test the hypothesis, analyze the data, consider alternative explanations and draw conclusions supported by evidence from the investigation.
Fly by Math	MN	SCI.9-12.9.1.3.4.4	Relate the reliability of data to consistency of results, identify sources of error, and suggest ways to improve data collection and analysis.
Smart Skies			
2009 Science			
Academic Standards			
Minnesota Science			
Grades 9-12 (Physics)			
Activity/Lesson	State	Standards	
Fly by Math	MN	SCI.9-12.9P.2.2.1.1	Use vectors and free-body diagrams to describe force, position, velocity and acceleration of objects in two-dimensional space.
Fly by Math	MN	SCI.9-12.9P.2.2.1.2	Apply Newton's three laws of motion to calculate and analyze the effect of forces and momentum on motion.
Line Up with Math	MN	SCI.9-12.9P.2.2.1.1	Use vectors and free-body diagrams to describe force, position, velocity and acceleration of objects in two-dimensional space.
Line Up with Math	MN	SCI.9-12.9P.2.2.1.2	Apply Newton's three laws of motion to calculate and analyze the effect of forces and momentum on motion.